CLAIMS

1.   An apparatus adapted for connection to a host system and for receiving electric power from the host system, the apparatus comprising:

a plurality of function blocks, each function block performing a specified function when selected by the host system; and

a circuit operable to control each said function block selected by the host system to consume power at an operating rate and to control each said function block not selected by the host system to consume power at a standby rate less than said operating rate.

2.   The apparatus according to claim 1, further comprising:

a function code identifying each of said plurality of function blocks; and

a function register common to said plurality of function blocks, said function register storing said function code for each said function block selected by the host system, wherein said circuit is operable to control each said function block whose function code is stored in said function register to consume power at said operating rate and to control each said function block whose function code is not stored in said function register to consume power at said standby rate.

3.   An apparatus adapted for connection to a host system and for receiving electric power from the host system, the

apparatus comprising:

a plurality of function blocks, each function block performing a specified function when selected by the host system;

a function code identifying each of said plurality of function blocks;

a circuit operable to control each said function block selected by the host system to consume power at an operating rate and to control each said function block not selected by the host system to consume power at a standby rate less than said operating rate; and

a register common to said plurality of function blocks, said register storing said function code for each said function block selected by the host system and a power save value indicating that a power save mode has been selected by the host system;

said circuit being operable to control each said function block whose function code is not stored in said register to consumer power at said standby rate when said power save value is stored in said register.

4.   A data processing system, comprising:

an apparatus for performing at least one function; and

a host system for supplying electric power to said apparatus;

said apparatus including:

a plurality of function blocks, each function block

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performing a specified function when selected by said host system;

a function code identifying each of said plurality of function blocks;

a function register common to said plurality of function blocks, said function register storing said function code for each said function block selected by said host system; and

a circuit operable to control each said function block whose function code is stored in said function register to consume power at an operating rate and to control each said function block whose function code is not stored in said function register to consume power at a standby rate less than said operating rate; and

said host system including a writing unit operable to write said function code for each said function block selected by said host system into said function register.

5.   A data processing system, comprising:

an apparatus for performing at least one function; and

a host system for supplying electric power to said apparatus;

said apparatus including:

a plurality of function blocks, each function block performing a specified function when selected by said host system;

a function code identifying each of said plurality of function blocks;

a register common to said plurality of function

blocks, said register storing said function code for each said function block selected by said host system and a power save value indicating that a power save mode has been selected by said host system; and

a circuit operable to control each said function block whose function code is stored in said register to consume power at an operating rate and to control each said function block whose function code is not stored in said register to consume power at a standby rate less than said operating rate when said power save value is stored in said register.

6. The data processing system according to claim 5, wherein said host system includes a writing unit operable to write said function code for each said function block selected by said host system and said power save value into said register.

7. In a data processing system including a host system and an apparatus for performing functions, the apparatus including a plurality of function blocks and a register common to the plurality of function blocks, each function block performing a specified function when selected by the host system, a method of controlling power consumption of the apparatus, comprising:

supplying electric power from the host system to each of the plurality of function blocks at a standby rate of consumption;

operating the host system to select a function block from among the plurality of function blocks;

controlling the host system to send the function

code of the selected function block to the apparatus;

controlling the apparatus to set the function code of the selected function block to the register; and

reading the function code of the selected function block from the register and controlling power consumption of the plurality of function blocks so that the selected function block consumes power at an operating rate of consumption greater than said standby rate of consumption and each said function block whose function code is not stored in the register consumes power at said standby rate of consumption.

8.   In a data processing system including a host system and an apparatus for performing functions, the apparatus including a plurality of function blocks, each function block performing a specified function when selected by the host system, a method of controlling power consumption of the apparatus, comprising:

supplying electric power from the host system to each of the plurality of function blocks at a standby rate of consumption;

operating the host system to select a function block from among the plurality of function blocks;

controlling the host system to send a notification to the apparatus identifying the selected function block;

controlling power consumption of the plurality of function blocks so that each function block not selected by the

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host system consumes power at the standby rate of consumption and the selected function block consumes power at an operating rate of consumption greater than the standby rate of consumption.